Savannah River Site

Citizens Advisory Board

Recommendation # 274

Liquid Waste Programmatic Risk Reduction-Spare Equipment and Spare Parts

Background The CAB would like to acknowledge DOE's extensive planning to meet its program objectives on time and within budget. In particular, the CAB would like to reference the following reports as examples: SRS Strategic Plan, EM Program Management Plan, SRS Liquid Waste System Plan, Critical Path Schedule, Project Risk Management Plans, Risk and Opportunity Management Plan and the System Health Monitoring Program.

Recent presentations to the CAB have shown the two highest programmatic risks for the Liquid Waste System Plan as: Equipment Reliability and Major System Failure. To a large extent, these risks can be equated to a lack of spare equipment and/or spare parts.

Equipment reliability and major equipment failure are a major concern to the CAB. Meeting tank closure commitments requires that key equipment operate at the expected operating/production rates. One major outage could very quickly affect the entire operating system. In addition, delays could extend the time associated with recovery and treating waste in the High Level Waste Tanks. Major outages are expensive, considering the cost to operate the Liquid Waste Systems is in the range of $500M per year.

The issue regarding spare equipment and/or spare parts is becoming more important considering that the existing Liquid Waste facilities are aging and are being required to operate at two to four times historical rates in order to meet present tank closure schedules. In addition, the operating conditions are changing with many becoming more severe and probably resulting in reduced equipment life.

Recommendation: The Savannah River Site Citizens Advisory Board recommends that DOE:

1) Describe how projected life expectations are determined and then utilized in the development of a list of spare equipment and spare parts.

2) Describe how the spare equipment and/or spare parts program is or is not consistent with shorter life history scenarios.

3) Identify areas of significant risk reduction and explain how these risk reductions relate to the spare equipment and spare parts budget.

4) For existing operations, identify areas where equipment life histories are being "pushed" because of operating rates or more extreme operating conditions. (For example: Defense Waste Processing Facility (DWPF) melter and off-gas system, Saltstone production equipment and sludge batch preparation equipment.)

5) For Salt Waste Processing Facility (SWPF), provide the strategy that will be used to determine equipment life and spare parts inventory.